

comprises of the transformation of the text into electronic data, and the reproduction 78 of the translation comprises also the re-transforming of the electronic data for example into loudspeaker signals for acoustic reproduction 80.

#### **C l a i m s :**

1. Electronic data transmission device (2) with
  - an electronic text recording device (8, 34) which records a text (68, 70) which is written or spoken in a first language, and transforms into electronic data,
  - an electronic data translation device which is in data transmission connection (40) with a text recording device (34) and which comprises a data processing system (60) and a translation program saved in the processor (60) or a data saving system with a data bank (69, 74, 75) with saved grammatical and vocabulary information (language rules) on the first and a second language and translates the electronic data by means of the processor (60) according to the language rules (69, 74, 75) into second electronic data which represent the recorded text in the second language, and with an electronic text reproduction device (10, 44) which is in data transmission connection with the data translation device and which reproduces the second electronic data as written and/or spoken text (80, 82).
2. Text transmission device according to Claim 1, wherein the electronic recording device has a script scanner (34) and a processor and a script recognition program saved in the processor or a data saver and/or a microphone (8) and/or a keyboard (16) and/or data entering interface (52).
3. Text transmission device according to one of the preceding claims wherein the electronic reproduction device contains a loudspeaker (10) and/or a screen (44) and/or a printer and/or a data exit interface (46).

4. Text transmission device according to one of the preceding claims wherein the data bank (69, 74, 75) of the translation program comprises language rules of more than a second language and the translation device contains a language selection device (16-28) for selection of the second language.
5. Text transmission device according to one of the preceding claims wherein the language rules (69, 74, 75) contain interdependence of the gender of an author of the language and the translation device contains a recording device (30) for entering the gender of the author and the translation device takes reference to these interdependence at translation from the first and/or into the second language.
6. Text transmission device according to one of the preceding claims wherein the language rules (69, 74, 75) contain interdependences from the grade of courtesy and/or formality of the author towards a recipient and that the translation device contains a recording device (32) for entering the grade of courtesy and/or formality and the translation device refers to these dependences at translation from the first and/or into the second language.
7. Text transmission device according to Claim 6, wherein the grade is selectable between "personal" and "formal".
8. Text transmission device according to one of the preceding claims wherein
  - a first device unit (2) contains a first electronic text recording device (8) for the spoken language, a first electronic translation device and a first electronic reproduction device (10) for the spoken reproduction
  - a second device unit (6) contains a second text recording device (34) for the written language, a second electronic translation device and a

second electronic reproduction device (44) for the written reproduction and

- the first device unit (4) and the second device unit (6) contain co-functioning connection media (50, 52) for signal connections for written reproduction of the translation recorded from the first device unit of spoken text by means of the second device unit and/or the spoken reproduction of the written translation recorded by the second device unit by means of the first device unit.

9. Process for electronic transmission of a text (68, 70) from a first language into a second with the steps:

- electronic recording of a text spoken or written in a first language (68, 70) als electronic data,
- program guided electronic separation (71) of data in words of the text according to a first table (69) in which the words of the first language are contained,
- program guided electronic determination of an indication code of each word of the text (68, 70) according to the first table in which the indication code is assigned in addition to each word of the first language
- for each of the words of the text (68, 70) a program guided electronic determination (72) of a word of same meaning of the second language according to a second table (74) in which the same indication code is assigned to each word of the second language with the same meaning
- a program guided electronic assignment (72) of the ascertained word of the second language according to the sequence and sentence structure of the words in the first text (68, 70)
- a program guided electronic adjustment (76) of the grammatical form of each of the assigned words to the remaining of the assigned words of the same sentence according to at least one table (75) in which the grammatical coherences of the second language are contained

- an electronic reproduction (78) of electronic data which represent the sentence formed from the assembled words in the second language as written or spoken text (80, 82).

10. Process according to Claim 9, wherein the steps (66, 71, 72, 76, 78) are performed in reality time without interim saving of the data.

11. Process according to Claim 9 or 10, wherein the first table (69) and/or the second table (74) contain a sound signal assigned to each word which represents the usual pronunciation of the word of the corresponding language and the sound signal is applied for reproduction (78) of the spoken text.

12. Process according to one of the Claims 9 to 11 wherein the use of the device (2) according to one of the Claims 1 to 8 applies.